

What is claimed is:

1. A method, comprising:  
associating each of at least one group of packets forming a bitstream  
with a stream identifier and a respective sequence code, said at least one  
5 group of packets comprising at least one bitstream packet; and  
transmitting, via any one of a plurality of available transmission channels,  
each of said at least one group of packets, said transmission channels  
nominally transmitting NULL packets in the event of underutilization, said at  
least one group of packets being transmitted in place of said nominally  
10 transmitted NULL packets.
2. The method of claim 1, wherein at least one of said at least one  
group of packets forming said bitstream are correlated with channel  
identification and time of transmission information for, respectively, indicating  
15 which of said plurality of transmission channels will carry respective packet  
groups and the time said at least one group of packets are carried.
3. The method of claim 1, further comprising:  
adapting the packet structure for each packet of said at least one group  
20 of packets to conform to a network packet structure suitable for use by said  
transmission channels.
4. The method of claim 3, wherein:  
said network packet structure comprises a header portion and a payload  
25 portion, said payload portion including at least one associated groups of  
packets.
5. The method of claim 4, wherein:  
said network packet structure includes stream identifier and sequence  
30 code information corresponding to said at least one group of packets included  
within said payload portion.

6. The method of claim 5, wherein:  
said network packet structure includes transmission channel and time of  
transmission information.

- 5 7. The method of claim 1, wherein said step of transmitting  
comprises:  
determining the loading of each of a plurality transmission channels;  
determining an allocation of bitstream packets among the transmission  
channels; and  
10 inserting non-allocated bitstream packets into said transmission  
channels in place of said nominally transmitted NULL packets.

8. The method of claim 7, wherein said allocation of bitstream  
packets among said transmission channels is determined with respect to at  
15 least one of the following criteria:  
transmission channel data rates, bitstream data rate, transmission  
channel utilization level, transmission channel loading level, transmission  
channel scheduling, bitstream quality of service requirement.

- 20 9. The method of claim 1, wherein a first transmission channel  
comprises a primary transmission channel with respect to a first bitstream,  
wherein an initial portion of said group of packets associated with said first  
bitstream is transmitted via said first transmission channel and a remaining  
portion of said packets associated with said first bitstream is transmitted via at  
25 least one additional transmission channel.

10. The method of claim 9, wherein said at least one additional  
transmission channel is identified by channel identification information  
associated with some of said at least one group of packets forming said  
30 bitstream.

11. The method of claim 10, wherein said at least one group of packets forming said bitstream to be transmitted via said identified channel are further associated with time of transmission information for indicating when such transmission will occur.

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12. The method of claim 11, wherein said step of transmitting comprises launching said at least one group of packets in accordance with channel identification and time of transmission information associated with said at least one group of packets.

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13. Apparatus, comprising:

a bitstream processor, for associating each of at least one group of packets forming a bitstream with a stream identifier and a respective sequence code; and

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a network interface, for causing said associated at least one group of packets to be inserted into any one of a plurality of available transmission channels in place of NULL packets nominally transmitted in the event of transmission channel underutilization.

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14. The apparatus of claim 13, wherein said bitstream processor further associates at least one of said at least one group of packets forming said bitstream with channel identification and time of transmission information for, respectively, indicating which of said plurality of transmission channels will carry respective packet groups and the time said respective packet groups are

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carried.

15. The apparatus of claim 14, wherein said network interface utilizes said channel identification and time of transmission information to allocate respective transmission channel time slots to said at least one group of packets to be transmitted via said identified channel.

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16. A data structure adapted to the transport of data via a communications network, said data structure comprising a header portion and a payload portion, said payload portion including at least one packet from an initial bitstream, said at least one packet having associated with it a stream identifier and a sequence code, said stream identifier identifying said initial bitstream, said sequence code identifying a relative position within said initial bitstream of said at least one packet.

17. The data structure of claim 16, wherein said stream identifier and said sequence code are stored within said header portion of said data structure.

18. The data structure of claim 16, wherein said stream identifier and said sequence code are stored within the payload portion of said data structure.

19. The data structure of claim 16, wherein said at least one packet further is further associated with channel identification and time of transmission information for, respectively, indicating which of a plurality of transmission channels will convey said corresponding at least one packet and at what time said corresponding at least one packet will be conveyed by said identified transmission channel.

20. The data structure of claim 19, wherein said channel identification and time of transmission information are stored within said header portion of said data structure.

21. The data structure of claim 19, wherein said channel identification and time of transmission information are stored within the payload portion of said data structure.